Remarks:

In the specification, paragraph [29] has been amended to correct an editorial problem.

Claims 1 - 8, 10 and 12-18 are pending in the present application. Claims 1 - 8, 10 and 12-18 are rejected. Claims 9 and 11 are canceled. Claims 1 and 10 are amended. No new matter is added.

Claim Rejection Under 35 U.S.C. § 102

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. 2002/0100686 A1 by Knevels et al. Applicants respectfully traverse the rejection of the claim.

Applicants have amended claim 1 such that the following feature of the probe is present: a cover for the entry surface of the probe ready for operation wherein the cover is in the form of a foil arrangement and that the probe comprises mechanical means, which press the foil arrangement from outside into close contact with the entry surface.

It is submitted that the Knevels reference does not recite a foil arrangement which is pressed by a mechanical means on the outside such that close contact is made with the entry surface of the probe.

Therefore, as the Knevels reference fails to teach at least one feature of the invention it is submitted that the rejected claim 1 is not anticipated by Knevels et al for the reasons stated above. Reconsideration of the rejected claim 1 and its allowance is respectfully requested.

Claim Rejection Under 35 U.S.C. § 103

Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knevels et al. (US 2002/0100686 A1). Applicants respectfully traverse the rejection of the claims. On page 4 of the Office Action it is stated that to make the solid electrolyte tube and foil

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arrangement covering it with a flat end wall would be a matter of choice. Applicants submit that one of ordinary skill in the art would not have arrived at the invention with a cover for the entry surface of the probe ready for operation wherein the cover is in the form of a foil arrangement and that the probe comprises mechanical means, which press the foil arrangement from outside into close contact with the entry surface based on any teaching, suggestion or motivated from the Knevels reference.

Therefore, reconsideration of the rejected claims 7 and 8 and their allowance are respectfully requested.

Claims 2, 3 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knevels et al. (US 2002/0100686 A1) in view of Fray et al. (GB 1,594223) Applicants respectfully traverse the rejection of the claims. On page 6 of the Office Action it is admitted that the Knevels reference fails to teach a foil arrangement comprising at least one foil oxidizable by the oxygen contained in the melt (claim 2 and 3) and a binder (claim 10) therefore the Fray reference is allegedly cited for that purpose. Applicants submit that one of ordinary skill in the art would not have arrived at the present invention based on the teachings of Fray and that the Fray reference does not cure the above stated deficiencies of the Knevels reference regarding a mechanical means, which press the foil arrangement from outside into close contact with the entry surface as compared to the claimed features of the present invention.

Therefore, reconsideration of the rejected claims 2, 3 and 10 and their allowance are respectfully requested.

Claims 4-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knevels et al. (US 2002/0100686 A1) in view of Fray et al. (GB 1,594,223) and in view of Misener et al. (US 3,755,126). Applicants respectfully traverse the rejection of the claims. In the Office Action it is admitted that the combination of Knevels with Fray fails to teach a copper foil which covers a first foil and the Misener reference is cited for that purpose. Applicants submit that one of ordinary skill in the art would not have arrived at the present invention based on the teachings of

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Fray and that the Fray reference does not cure the deficiencies of the Knevels reference regarding a mechanical means, which press the foil arrangement from outside into close contact with the entry surface as compared to the claimed features of the present invention.

Therefore, reconsideration of the rejected claims 4-6 and their allowance are respectfully requested.

Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knevels et al. (US 2002/0100686 A1) in view of Fray et al. (GB 1,594,223) and further in view of Kobayashi et al (US 4,969,835). Applicants respectfully traverse the rejection of the claims.

On page 8 of the Office Action it is admitted that the combination of Knevels and Fray do not teach a means to keep the foil arrangement in close contact with the entry surface of the solid electrolyte where the means is a mechanical means pressing from the outside and therefore the examiner cites the Kobayashi reference for that purpose. Applicants submit that the Kobayashi reference is directed to an altogether different nonanalogous art than the applicants field of invention and therefore the reference could not be combined with the Knevels and Fray reference.

In addition to the above reasons for not being able to combine the cited references together the utility of the Kobayashi reference would be destroyed if the features of the Kobayashi reference were inserted into a steel melt.

Therefore, reconsideration of the rejected claims 12-18 and their allowance are respectfully requested.

Applicants respectfully request reconsideration of the rejections set forth in the Office Action of October 10, 2008.

In view of the foregoing amendments and remarks, Applicant submits that this application is in condition for allowance. Early notification to that effect is respectfully requested.

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The Assistant Commissioner for Patents is hereby authorized to charge Deposit Account 13-3639 the fee of \$130, which is the fee required under 37 CFR 1.136(a) to extend the period for filing a reply by one month and to charge any additional fees or to credit any excess payment that may be associated with this communication.

Respectfully submitted,

Dated: February 10, 2009

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